

Remarks/Arguments

The Applicant thanks the Examiner for his careful consideration of the subject matter of the claims.

The Applicant respectfully requests reconsideration of this application as amended. Claims 11 and 18 have been amended. Claims 16 and 17 have been canceled without prejudice. No new claims have been added. Therefore, claims 1-13 and 18-78 remain present for examination. Applicant respectfully submits that no new matter has been added by this amendment.

Priority

In the Office Action, the Examiner indicated that the Applicant had not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. § 120. The Examiner's assertion that "mere statement of incorporation by reference in the parent 09/495,982 is not seen to be sufficient" contradicts applicable law. In addition, the Examiner's observation that the detailed descriptions of the patents incorporated by reference should be "meaningfully interwoven" with the disclosure of the parent application is also mistaken. The Examiner relies on an improper application of the doctrine of incorporation by reference. This application remains a continuation of application serial no. 09/495,982, filed on February 1, 2000, which is a continuation-in-part of U.S. Patent No. 6,021,397, filed on December 2, 1997.

The undersigned agrees that "[t]he second application must be an application for a patent for an invention which is also disclosed in the first application (the parent or provisional application); the disclosure of the invention in the parent application and in the second application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112." *Manual of Patent Examining Procedure* § 201.11(A) (8th ed., rev. 1, 2003) [hereinafter *MPEP*]; see *Transco Prods., Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32

U.S.P.Q.2d 1077 (Fed. Cir. 1994). However, the Board of Patent Appeals and Interferences has held that incorporation by reference in a parent application is sufficient disclosure under 35 U.S.C. 112, first paragraph, for such priority purposes.

Neither 35 U.S.C. 119(a) nor 35 U.S.C. 120 places any restrictions or limitations as to how the claimed invention must be disclosed in the earlier application to comply with 35 U.S.C. 112, first paragraph. Accordingly, an application is ***entitled to rely upon the filing date of an earlier application, even if the earlier application itself incorporates essential material by reference to another document.*** See *Ex parte Maziere*, 27 USPQ2d 1705, 1706-07 (Bd. Pat. App. & Inter. 1993).

MPEP § 608.01(p)(I)(B) (emphasis added). In the *Maziere* case, applicants filed two patent applications for radioactive compounds for use in imaging monoamine receptors: the '090 application which disclosed and claimed iodine compounds and the '944 application which disclosed and claimed bromine compounds. *Ex parte Maziere*, 27 U.S.P.Q.2d 1705, 1706 (Bd. Pat. App. & Inter. 1993). Each application incorporated the other by reference. *Id.* The '944 bromine application was abandoned, after which a continuation application of the '090 patent application was filed. *Id.* The continuation disclosed and claimed the bromine compound. *Id.* The Board found that the bromine compound was properly incorporated by reference in the '090 patent application. *Id.* at 1707. Consequently, the Board held that there had been adequate disclosure under 35 U.S.C. 112, first paragraph, of the '944 bromine patent application subject matter in the '090 iodine parent application because the '090 iodine parent application incorporated by reference the '944 patent application. *Id.* This gave the continuation application the priority date of the '090 parent application. *Id.*

In the present application, the claimed material was disclosed not only by the parent application, but also by the grandparent application. The parent application, serial no. 09/495,982, expressly incorporated by reference U.S. Patent Nos. 5,918,217 and 6,012,044 (p. 23, lines 17-19). The parent application was filed on February 1, 2000. In addition, the grandparent of the present application, U.S. Patent No. 6,021,397, from which the parent was a

continuation-in-part, also expressly incorporates by reference the application serial no. 08/988,226 (col. 12, lines 35-42) which became U.S. Pat. No. 5,918,217. The grandparent was filed on December 10, 1997. And although these prior applications meet the requirements of *MPEP* § 608.01(p)(I)(A) for incorporation by reference, such requirements do not apply in this situation because all matter claimed in the present application is adequately disclosed in the present application by "actual incorporation" and the prior incorporation by reference is instead relied on for establishment of a priority date. *See MPEP* § 608.01(p)(I)(B) ("The limitations on the material which may be incorporated by reference in U.S. patent applications which are to issue as U.S. patents do not apply to applications relied on only to establish an earlier effective filing date under 35 U.S.C. 119 or 35 U.S.C. 120."). Consequently, the claims of the present application were fully supported by the parent application and are entitled to the benefit of the filing date of the parent application. In addition, subject matter disclosed in both the present application and the grandparent application is entitled to the benefit of the filing date of the grandparent application, of which the parent is a continuation-in-part.

Oath/Declaration

In the Office Action, the Examiner indicated that the oath or declaration was defective. The Applicant respectfully requests the Examiner to reconsider this point. The declaration is not defective. The declaration fully complies with 37 C.F.R. §§ 1.66 & 1.68. The Applicant was unable to locate any authority in 37 C.F.R. § 1.66 or 37 C.F.R. § 1.68 or *MPEP* § 602.01 or *MPEP* § 602.02 to support the claim that a signature and a date must be of the same color ink, or of the same style of handwriting. Furthermore, the Examiner has given no reason to believe that the declaration was executed incorrectly or that the date was not written before the signature. Therefore, the Applicant believes the declaration to be valid and non-defective as it stands, and respectfully asks the Examiner to reconsider this point.

Double Patenting

In the Office Action, the Examiner rejected claims 1-78 under the judicially created doctrine of double patenting over claims 1-41 of U.S. Patent No. 5,918,217. U.S. Patent No. 5,918,217 is commonly owned with this application. Assignment of all rights to U.S. Patent No. 5,918,217 is recorded at reel 9094/frame 0846. Assignment of all rights to this application is recorded at reel 012172/frame 0240. In view of the terminal disclaimer included herewith the obviousness-type double patenting rejection has been overcome.

Claim Rejections - 35 U.S.C. § 112 2nd Paragraph

In the Office Action, the Examiner rejected claims 1, 3, 7, 20, 23-24, 32-33, 34, 43, and 52 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner asserted that the terms “feasible set of risk,” “feasible input decisions,” and “constrained to be feasible” are indefinite.

“Definiteness of claim language must be analyzed, not in a vacuum, but in light of ... [t]he content of the particular application disclosure ... and ... [t]he claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.” *MPEP* § 2173.02. The terms “feasible set of risk,” “feasible input decisions,” and “constrained to be feasible” are all definite and clear terms whose meaning is apparent to one possessing the ordinary level of skill in the art in light of: a) the claims themselves and b) the disclosure within the specification.

First, the context and claim language within the claims employing the term “feasible” render the terms at issue definite. Independent claims 1, 7, 20, 23, 32, 34, and 43 use the term “feasible set of risk.” In claims 1, 7, 23, 32, and 43, the term “a feasible set of risk” is directly

preceded and followed by claim language that helps to define and clarify the meaning of the phrase “feasible set of risk”: “*constrained to be within a feasible set of risk that is attainable by a particular investor via a set of financial products that are available to the particular investor for investment ...*” Claims 20 and 34 feature nearly-identical language (substituting “the” for “a”).

Dependent claims 3, 24, and 33 use the term “constrained to be feasible,” which term is directly preceded by claim language that helps to define and clarify the meaning of the phrase “constrained to be feasible”: “*wherein the target retirement age is constrained to be feasible.*”

Independent claim 52 uses the term “feasible input decisions,” which term is directly preceded and followed by claim language that helps to define and clarify the meaning of the phrase “feasible input decisions”: “*constrained to receive feasible input decisions relating to variables involved in pursuing the financial goal, the input decisions comprising an indication of a time horizon that is acceptable to a particular investor, an indication of a level of investment risk that is acceptable to the particular investor, and an indication of a level of savings that is acceptable to the particular investor ...*” The surrounding language of claim 52 not only implicitly defines and clarifies the “feasible input decisions” term, but does so explicitly with the language “the input decisions comprising ...”

In addition to receiving definition and clarification from surrounding claim language, the claim terms employing “feasible” also find support, definition, and clarification in the specification. The specification of the present application explicitly discusses or mentions “feasible” in at least the paragraphs 8, 9, 12, 45, 69, 160, 168, 170, 172 and 173. The following passages illustrate use of the terms:

To assure every position of the risk slider 1010 is within the *feasible set of risk* available to the user, the risk slider bar 1000 is *calibrated* based upon the *set of financial products that are available* to the user. Preferably, the simulation module 330 additionally keeps the user on the efficient frontier by *recommending*

only portfolios of financial products that will result in the highest return for a particular level of risk.

(Spec., p. 57, ¶ 172).

Also, the *retirement age* slider bar 1030 *may be constrained* to allow values *between the user's current age and an upper bound that may be determined with reference to actuarial data*, for example.

(Spec., p. 57, ¶ 173). This passage, for example, clearly shows that the definite scope of the term “retirement age” that is “constrained to be feasible” (as in dependent claims 3, 24, and 33) does not include: negative numbers, zero, an age less than the user’s current age, 500, 5000, etc. In addition to the specific discussion of “feasible set of risk,” “retirement age is constrained to be feasible,” and “feasible input decisions,” the specification and claims *as a whole* adequately define, clarify, and make apparent to one possessing ordinary skill in the art the meaning of the claimed phrases “feasible set of risk,” “feasible input decisions,” and “constrained to be feasible.”

For these reasons, Applicant believes that the aforementioned claims particularly point out and distinctly claim the subject matter regarded as the invention, *see MPEP* § 2173, and thus respectfully requests the Examiner to withdraw rejection of claims 1, 3, 7, 20, 23-24, 32-33, 34, 43, and 52.

Claim Rejections - 35 U.S.C. § 112 6th Paragraph

In the Office Action, the Examiner rejected claims 26-29 and 78 under 35 U.S.C. § 112 ¶ 6. Examiner stated a position that the “means for” phrases do not invoke 35 U.S.C. § 112 ¶ 6. Applicant respectfully disagrees. Applicant desires to invoke 35 U.S.C. § 112 ¶ 6 in these instances in claims 26-29 and 78, and hereby expressly states this desire on the record as instructed by the Examiner. For this reason, Applicant believes claims 26-29 and 78 to be allowable, and respectfully asks the Examiner to withdraw these 35 U.S.C. § 112 ¶ 6 rejections.

35 U.S.C. § 101 Rejection

In the Office Action, the Examiner rejected claims 1, 3-10, 16-17, 32-33, and 43-78 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Applicant respectfully disagrees, and submits that claims 1, 3-10, 16-17, 32-33, and 43-78 are directed toward statutory subject matter and meet the Court's definition of a "statutory process" under its 35 U.S.C. § 101 analysis.

The Examiner rejected these claims on the long discredited theory that a statutory process requires "treatment of materials such that subject matter is transformed and reduced to a different state." Notably, the United States Court of Appeals for the Federal Circuit rejected this argument in *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358 (Fed. Cir. 1999), where the alleged infringer argued that "method claims containing mathematical algorithms are patentable subject matter only if there is a 'physical transformation' or conversion of subject matter from one state into another." The court reasoned that "[t]he notion of 'physical transformation' can be misunderstood. In the first place, *it is not an invariable requirement*, but merely one example of how a mathematical algorithm may bring about a useful application." *Id.* (emphasis added). The court reiterated its finding from *Arrhythmia Research Technology, Inc. v. Corazonix Corp.*, 958 F.2d 1053 (Fed. Cir. 1992): "that the claimed process 'transformed' data from one 'form' to another simply confirmed that Arrhythmia's method claims satisfied § 101 because the mathematical algorithm included within the process was applied to *produce a number which had specific meaning – a useful, concrete, tangible result – not a mathematical abstraction.*" *AT&T Corp.*, 172 F.3d at 1359 (emphasis added); *see also MPEP* § 2106(IV)(B)(2)(b)(ii) ("claim is limited to a practical application [in the technological arts] when the method, as claimed, produces a concrete, tangible and useful result" citing *AT&T Corp.*, 172 F.3d at 1358).

The methods of claims 1, 3-10, 16-17, 32-33, and 43-78 do not merely manipulate an abstract idea or perform a purely mathematical algorithm; instead, they “produce a useful, concrete, tangible result.” *See AT&T Corp.*, 172 F.3d at 1359; *MPEP* § 2106(IV)(B)(2)(b)(ii). The method of independent claim 1 includes “*displaying* a set of one or more output values ... including *an indication of the probability of achieving the retirement income goal and an indication of the most likely retirement income* ... receiving an updated input decision ... *determining* one or more new output values ... and *refreshing* the set of one or more output values.” Although no apparatus appears to be recited by claim 1, no apparatus is necessary because claim 1 describes a computer-related process limited to a practical application in the technological arts. *See MPEP* § 2106(IV)(B)(2)(b)(ii). The specifically recited “output values” (i.e., the indication of the probability of achieving the retirement income goal and the indication of the most likely retirement income) are akin to “number[s] which ha[ve] a specific meaning – a useful, concrete, tangible result.” *See AT&T Corp.*, 172 F.3d at 1359. In claim 1, the specifically recited “output values” have useful, concrete, specific meaning as, among other things, they provide the investor or his/her financial advisor, for example, with useful and meaningful information that allows decisions to be made with respect to adjusting the specifically recited input objects relating to the target retirement age, the target level of investment risk, and/or the retirement income goal.

Similarly, claim 7 recites the steps of “*receiving* one or more input decisions from the user ... *determining* the probability of achieving the retirement income goal ... and *displaying the probability of achieving the retirement income goal*.” Claim 16 recites the steps of “*determining* a recommended allocation of wealth ... based on one or more decision inputs ... and *depicting the recommended allocation of wealth among the one or more financial products*.” Claim 32 recites the steps of “*displaying* ... a set of one or more output values ... including *the most likely value at retirement of a recommended portfolio* ... *receiving* an

updated input decision ... **determining** one or more new output values based upon the updated input decision; and **refreshing** the set of one or more output values to reflect the one or more new output values.” Claim 43 recites the steps of “**receiving** input decisions ... **determining** a recommended portfolio ... **determining** the probability ... **providing feedback regarding the likelihood of achieving the financial goal ... by displaying an indication of the probability** of the particular investor achieving the financial goal.” Claim 52 recites the steps of “**receiving** an indication ... **displaying** one or more input objects ... **determining** a recommended portfolio ... **displaying ... an indication of the probability of the particular investor achieving the financial goal.**” Claim 61 recites the steps of “**determining** a recommended allocation of wealth ... based upon ... input decisions ... **graphically depicting the recommended allocation of wealth among the one or more financial products.**” Claim 70 recites the steps of “**receiving an indication** of a financial goal ... **determining** expected returns and volatility of returns for each of a plurality of efficient portfolios ... **displaying** a representation of the recommended portfolio by **graphically depicting relative allocations of wealth among those of the financial products ... included in the recommended portfolio.**” Claim 78 recites the steps of “**receiving** an indication of a financial goal of a particular investor ... **displaying** a set of one or more input objects ... **determining** expected returns and volatility of returns ... **identifying** a recommended portfolio ... **displaying** a representation of the recommended portfolio by **graphically depicting relative allocations of wealth among those of the financial products ... included in the recommended portfolio.**”

These claim excerpts, though not the only evidence of compliance with 35 U.S.C. § 101, demonstrate that the method claims of the present invention qualify as statutory processes. The claimed statutory processes of the present invention clearly perform steps beyond mere abstract idea manipulation by (i) making determinations; (ii) making recommendations based on input from a user; and (iii) displaying useful, meaningful, and concrete output values that assist an

investor or his/her advisor in making investment decisions for purposes of achieving a particular financial goal. Consequently, it should be abundantly clear that the recited methods satisfy the software guidelines "Patentable Subject Matter – Computer-Related Inventions" set forth in *MPEP* § 2106 and in modern case law. For at least these reasons, claims 1, 7, 16, 32, 43, 52, 61, 70, and 78 are in condition for allowance, along with their dependent claims 3-6, 8-10, 17, 33, 44-51, 53-60, 62-69, and 71-78. Therefore, Applicant respectfully requests the Examiner to withdraw the unsupported 35 U.S.C. § 101 rejection of claims 1, 3-10, 16-17, 32-33, and 43-78.

Election/Restrictions

In the Office Action, the Examiner required restriction to one of a list of subcombinations disclosed as usable together in a single combination under 35 U.S.C. § 121. By this amendment, independent claim 18 has been broadened to serve as a generic claim that encompasses the several alleged subcombinations. Such alleged subcombinations are related, and claim 18 now encompasses these alleged subcombinations as species under a claimed genus. *See MPEP* § 806.05(d). Therefore, a restriction is now improper and is no longer required.

Multiplicity

In the Office Action, the Examiner rejected claims 1-78 based on undue multiplicity under 37 C.F.R. § 1.75(b). The Examiner requested Applicant to select thirty-five claims for examination. Applicant respectfully traverses the multiplicity rejection of claims 1-78.

Each of claims 1-13 and 16-78 claims a different scope of protection. In addition, the claims of this application are not "unduly multiplied," *see* 37 C.F.R. § 1.75(b), nor do they present the type of administrative burden that the multiplicity rejection is designed to handle, *see MPEP* § 2173.05(n). The Examiner has thoroughly examined the remaining seventy-six claims for the obviousness-type double patenting rejection made in the Office Action, eleven claims for

the 35 U.S.C. § 112 ¶ 2 rejection made in the Office Action, five claims for the 35 U.S.C. § 112 ¶ 6 rejection made in the Office Action, forty-nine claims for the 35 U.S.C. § 101 rejection, and all seventy-six claims for the election/restriction requirement made in the Office Action.

Consequently, it has been made clear by the Examiner's actions and statements regarding the claims that the claims currently present in this application are not unduly multiplied and are not too numerous for the Examiner to examine, which the court noted in a similar fashion in *In re Wakefield*, 422 F.2d 897, 902 (C.C.P.A. 1970). ("Examination of forty claims in a single application may be tedious work, but this is no reason for saying that the invention is obscured by the large number of claims. We note that the claims were clear enough for the examiner to apply references against all of them in his first action."). *MPEP* § 2173.05(n).

The undersigned respectfully submits that the Examiner's assertions that "Applicant's claims are repetitious and multiplied with a net result of a cloud of confusion" are incorrect and inconsistent with other statements made by Examiner. For example, in making an election / restriction requirement in the Office Action, the Examiner thoroughly examined all seventy-six claims and alleged the claims to be different enough to warrant nine distinct inventions. This is not consistent with a multiplicity rejection; *claims cannot be both repetitious and distinct at the same time*. Therefore, Applicant respectfully requests Examiner to reconsider the multiplicity rejection of claims 1-13 and 16-78. To the extent the Examiner refuses to withdraw the multiplicity rejection, then in accordance with *MPEP* § 2173.05(n), the Applicant hereby selects with traverse the following thirty-five claims for examination: 1-13, 18-30, 32-36, 43, 52, 61, and 70.

Conclusion

Applicant respectfully submits that the rejections have been overcome by the amendment and remark, and that the claims as amended are now in condition for allowance. Accordingly,

Appl. No. 09/904,707
Amdt. dated 9/16/03
Reply to Office Action of 4/16/03
Atty. Docket No. 59036-249737

Applicant respectfully requests that the rejections be withdrawn and that a Notice of Allowance be issued for claims 1-13 and 18-78.

Request for an Extension of Time

The Applicant respectfully petitions for a two-month extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. 1.136(a). Enclosed is a credit card authorization in the amount of \$410.00 to cover the necessary fee under 37 C.F.R. 1.17(a). Please charge our Deposit Account No. 06-0029 for any additional charge associated with such an extension.

Invitation for a Telephone Interview

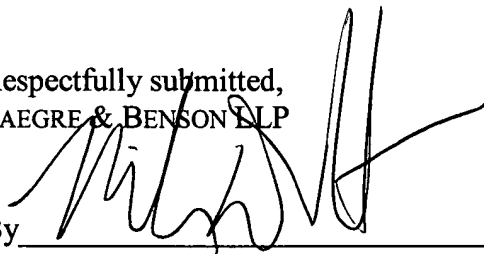
The Examiner is requested to call the undersigned at (303) 607-3633 if there remains any issue with allowance of the case.

Charge our Deposit Account

Please charge any shortage to our Deposit Account No. 06-0029

Respectfully submitted,
FAEGRE & BENSON LLP

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